UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,170	03/29/2001	Dan Martin Scott	108344.00016	4015

22852	7590	03/16/2006

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EXAMINER
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ART UNIT	PAPER NUMBER
2671	

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 January 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>18 and 20-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>18 and 20-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

01/06/06 has been entered.

1.   Claims 18 and 20-22 are pending in the application.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over R2V in view of Berger et al. (5,418,906).

Claim 21, R2V discloses an apparatus that is capable of georeferencing a raster

map (to geo-reference a raster image; R2V pages 1 and 2), comprising: means for

providing for display of a first map in a first area of a display (a source image; R2V page

2); means for providing for display of a second map in a second area of the display that

is separate from the first area of the display (the target image; R2V page 2), the first

map being a digital raster map (R2V page 2), and the second map being a previously

georeferenced map (the both images to be warped; RZV page 2), the first and second

maps covering substantially the same geographic area when that are displayed (the

new image will be displayed in the source image window; R2V page 2 and 3 and fig on

page 3); means for marking a first point pair (move the mouse within the source and

target image to find such a point; R2V page 2, section "B") on the display (the new

image will be displayed in the source image window), one point being on each map

(R2V page 2); means for marking a second point pair (move the mouse within the

source and target image to find such a point; R2V page 2) on the display (the new

image will be displayed in the source image window), one point being on each map

(R2V page 2), the corresponding points of the point pairs having the same geographic

location on each map (R2V pages 2 and 3); means for assigning to the points on the

first map a longitude coordinate and a latitude coordinate which are identical to the

longitude coordinate and latitude coordinate of their corresponding points on the second

map (coordinate values (X,Y); R2V pages 1 and 2); and means for computing a

georeferencing function based on pixel coordinates of the first point of each point pair

and geographic coordinates of the second point of each point pair wherein more than

two point pairs (at least 4 control points) are identified and are used to compute the

georeferencing function pursuant to a transformation technique (RV2, page 2); the

georeferencing function is computed pursuant to a general linear transformation (a

world file which contains 6 parameters to provide a linear transform; page 1). R2V

teaches control points and does not show point pairs; however, Berger et al teaches

determination of the coordinate pairs of the template extent; col. 4, line 63 through col.

5, line 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate determination of the coordinate pairs of the template taught by Berger into the method of image warping and geo-referencing using RV2 for creating the transformation function and the template map of the area of interest, because it would provide a method of converting multiple layers of spatial data from one geographic information system to another whereby the problem of determining multiple transformations is avoided, thus providing consistent distortions being more easily compensated for (col. 3, lines 32-37).

Claim 18, Berger et al. discloses wherein the points of the point pairs comprise marks on the first map at respective locations and marks on the second map at corresponding locations (four data points corresponding to the four corners (22,23,24,25) of the template; col. 4, lines 63-68).

Claim 20, Berger et al. teaches executing a validation check is further capable of rejecting a point pair when the point pair deviates from a predicted location by an amount exceeding a predetermined standard error (the points outside of the template area are not; col. 4, lines 53-62).

Claim 22, the rationale provided in the rejection of claim 17 is incorporated herein. In addition, R2Vteaches the georeferencing function is computed pursuant to a general rotational linear transformation (if an image is not geometrically distorted in any way (not rotated, not skewed, not in a mountain area) as compared to the base map, an one step geo-referencing may work; page 2).
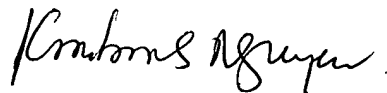
4.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (571) 272-7644. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached at (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 10, 2006

KIMBINH T. NGUYEN
PRIMARY EXAMINER